

ABSTRACT

A linear motor includes tubular outer yoke (4), tubular inner yoke (3) disposed in outer yoke (4), coil (2) provided to inner yoke (3), permanent magnet (5a, 5b) vibrating following a magnetic flux produced by coil (2), and vibrator (6) made of magnetic material and supporting permanent magnets (5a, 5b). Magnetic loop produced by outer yoke (4) and inner yoke (3) travels through vibrator (6) free from interference by vibrator (6) because vibrator (6) is made of magnetic material. As a result, the linear motor vibrates efficiently.